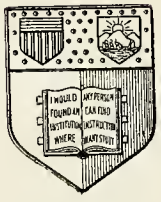
MAPLE BEECH and BIRCH Flooring

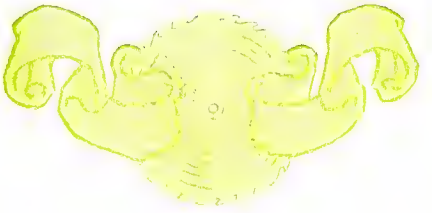
1911



OFFICIAL MAPLE FLOORING BOOK

Containing Concise and Authentic Information for Architects & Builders Concerning the Characteristics and Uses of

MAPLE, BEECH AND BIRCH FLOORING



Compiled & Published by the

Maple Flooring Manufacturers' Association

1308 Rector Building

CHICAGO ILLINOIS

CONTENTS

BELIEVING that concise and reliable information pertaining to the uses and relative merits of Maple, Beech and Birch Flooring as compared with other woods, the adaptability of the different grades, thicknesses and faces to the purposes for which they are best suited, and that a more intimate acquaintance with these products will lead to their greater appreciation and more extensive use, the Maple Flooring Manufacturers' Association has caused this booklet to be compiled and published for distribution among Architects, Builders and others interested in this subject.

A few of the many buildings in all sections of the country in which flooring of Association manufacture is in use, are shown in these pages and serve to indicate the high regard in which our product is held by architects and builders everywhere.

Grateful acknowledgment for the material used in the compilation of this book is made to numerous authorities, among them the many individual manufacturers of flooring, whose courage, persistence and devotion to the principle of doing things better have resulted in the development of an article superior to all other lumber products.

Maple Flooring Manufacturers' Association
Chicago, Illinois

Birdseye View of the University of Chicago

MAPLE, Beech and Birch, which are similar in many of their characteristics, are the three most staple and trustworthy hardwoods for flooring use.

Maple

Maple flooring is unquestionably without a peer and is unrivalled for floors that are subjected to hard and constant use. It has been conclusively demonstrated that under these conditions it will long outwear the best all-heart edge-grain yellow pine, gum, fir, ash or oak.

It has won its way by its intrinsic merit and based on comparative cost and durability, it is the most economical flooring manufactured.

Beech *and* Birch

Beech and Birch flooring are very like Maple in texture and next to it in value as flooring material. They will last longer and look better under steady wear and grind than any other wood except Maple.

They take color stain readily and are susceptible of a beautiful finish and are therefore especially adapted for use in dwellings where both artistic effects and utility are desired.

Permission of American Lumberman.

MAPLE

THE Hard or Rock Maple is indigenous to our common country from Maine to Minnesota, but in the hardwood forests of the north, in the region of the Great Lakes, it attains its highest perfection in quality of timber, size and symmetry, often reaching a diameter of three feet and rising sixty feet to the first limb. Individual trees on fertile soil occasionally reach one hundred and twenty feet in height.

The distinctive feature of the wooded landscape and the real "King of the Forest" is the Hard Maple.

During the past twenty years Hard Maple, as lumber, has developed rapidly until it is now the second in importance in the hardwood lumber industry of the country.

Its greatest production is in Michigan, which State contributed 46 per cent of the Maple lumber output of 1908, according to the United States Forest Service Reports.

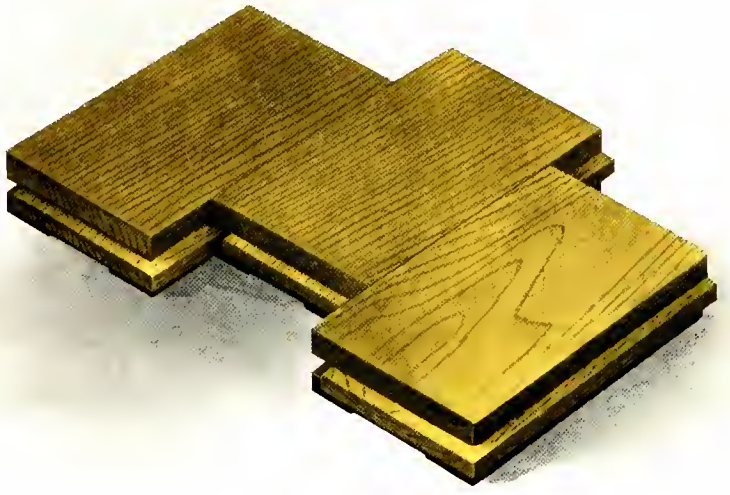
ITS CHARACTERISTICS & USES

THE wood is tough, heavy, strong, dense and very hard, will take a high polish, wears evenly, never shells, splinters or disintegrates from ordinary uses in any manner whatever and is extremely durable when not placed in contact with the soil.

The color of the heartwood is brownish and the sapwood which predominates is much lighter. The structure is compact and the grain close—occasionally curly or birdseye.

It has a breaking strength nearly equal to Hickory and in the form of lumber is employed extensively in the construction of agricultural implements, vehicles, furniture and shoe lasts, its physical characteristics making it indispensable for such uses.

Because it possesses these qualities to a preeminent degree and has vital tenacity and ability to resist pointed pressure without abrasion, it is unexcelled for flooring and it is known to experts as having from two to three times the wearing tenure of other woods commonly utilized for flooring purposes.



Permission of American Lumberman.

BEECH

IN full growth this beautiful tree is round-topped, with wide-spreading branches and shows a normal altitude of about sixty feet. In its forest form it often attains a height of 120 to 140 feet, with smoothly rounded bole as symmetrical as the pillar of a cathedral and a diameter of two to four feet. The bark is light gray and remarkably smooth.

Of the Beech lumber output of 1908, Michigan produced 21 per cent, according to the Forest Service Reports.

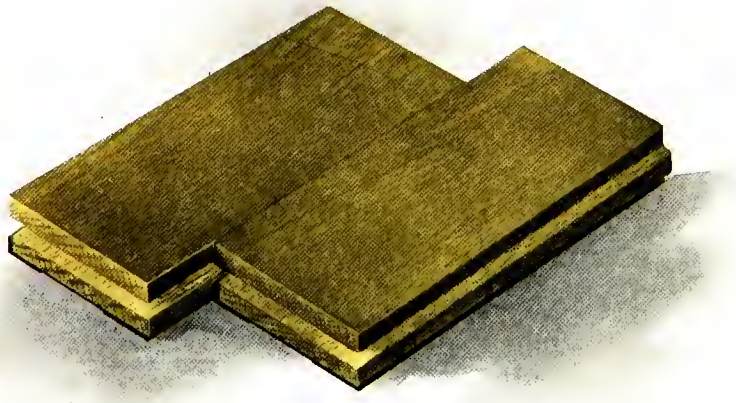
ITS CHARACTERISTICS & USES

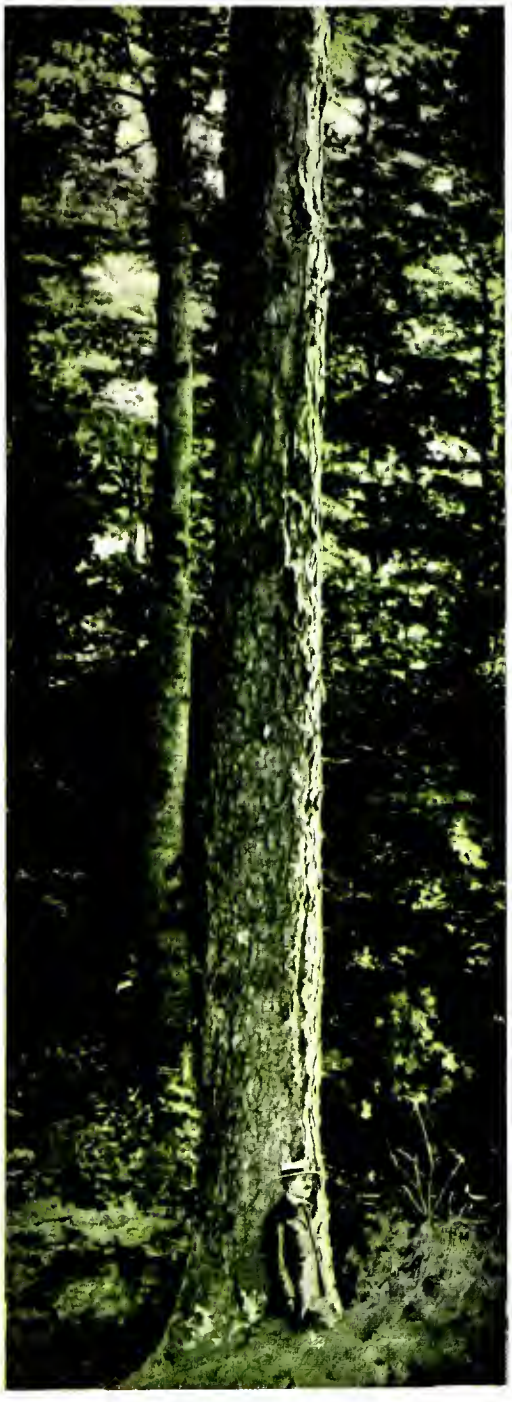
THE wood is close-grained, hard, strong and tough. The grain slightly resembles Oak in appearance. The color of the heartwood is reddish, the sapwood nearly white.

Representative uses of the wood are for inside finish and flooring where a beautiful color is sought and for carpenters' planes, tool handles, etc., where a strong, smooth surface is desired.

It is only within the last few years that Beech has been considered an important commercial wood. Of late its merits have been exploited and appreciated and it now constitutes a large element of hardwood manufacture.

The physical qualities and appearances of Beech and Maple are so similar that Beech flooring can be used where Maple is intended, but in some instances Beech is frequently preferred to Maple when certain artistic effects are desired, because its color is of a darker and warmer hue and as its grain is more open it takes and retains a fine stain and finish.





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BIRCH

THIS tree is known as black birch, cherry birch and sweet birch and is one of the best known and most highly prized natives of the northern forests. It is round, with slender branches, and in height ranges from thirty to ninety feet. Its bark is dark brown and smooth when young, but rough as the tree grows old. The diameter runs from two to four feet in forest growth.

Of Birch lumber, Wisconsin and Michigan produced 51 per cent of the cut of 1908, according to the Forest Service Reports.

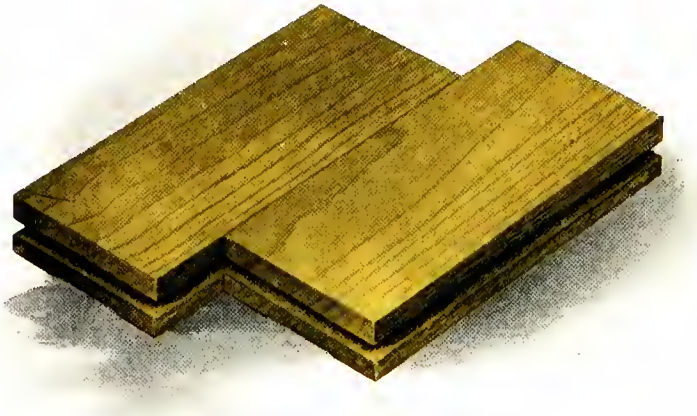
ITS CHARACTERISTICS & USES

THE grain is close, the structure compact and the wood heavy, strong and hard, taking stain and a high polish very readily. The heartwood is dark brown tinged with red, while the sapwood has a yellow tone.

Representative uses of Birch are for furniture, interior finish, doors, veneers and flooring.

Because of its fine physical characteristics and color and because it lends itself readily to staining in imitation of mahogany, it has become a great favorite with the furniture-maker. For interior finish it is becoming very popular in this country and abroad. Its rich, cheerful color and ability to hold color, as well as its durability, make it a favorite for doors and trim.

There is a certain sheen to Birch that is possessed by few woods; under a smooth and perfect finish it has a sparkling luster, due to the grain and linings of the pores. It makes a most beautiful, artistic and durable floor.



Comparative Wearing Qualities

TESTS observed show the following comparative values for wearing qualities, under practically the same conditions, of woods used for flooring:

First—Maple

Second—Beech and Birch

Fourth—Oak, Quarter-Sawed

Fifth—Yellow Pine, Quarter-Sawed

Sixth—Fir, Quarter-Sawed

Seventh—Oak, Plain Sawed

Eighth—Yellow Pine, Plain Sawed

Ninth—Fir, Plain Sawed

Tenth—Norway Pine

Eleventh—White Pine

Residence of J. M. Longyear

Brookline, Mass.

Built at Marquette, Mich., in 1891, torn down, removed and rebuilt in Brookline, Mass., in 1904. The original Maple Flooring was found in excellent condition and shipped to Brookline and used in reconstructing the residence.

Duluth High School

Duluth, Minn.

Built in 1891. The Maple Flooring laid in this building in 1891 was examined in 1910 and found to be in excellent condition after nineteen years' hard use. None of it has ever been replaced.

Experience of John Wanamaker

FOR steady wear and grind of a flooring material, probably about the hardest place in the country is at the foot of the main staircase in the big store of John Wanamaker of Philadelphia. On this particular spot the heavy tread of many thousands descends daily, with the result that the frequent visitor at this establishment cannot fail to notice new floor patches at this spot at very short intervals.

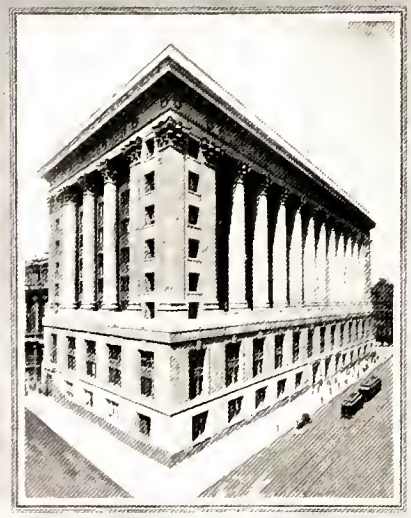
It is said that Wanamaker has employed almost every known floor material at this point, but all have shared a like fate and soon have worn out. Oak, Yellow Pine of all sections, tile, marble and stone have succeeded each other in rapid turn.

Resort was eventually had to *Maple flooring*, and while even that eventually wears out in this trying place, yet *it has stood the test better and longer than any other material* used in the past. This fact should be a good advertisement for the wear-resisting qualities of Maple, as John Wanamaker is not celebrated for making sentimental purchases.

—*From American Lumberman*

Wanamaker Building, Philadelphia

Association Flooring used in all buildings illustrated in this book



La Salle St. Station
Harvester Building
Ashland Block

Masonic Temple
County Building
The Rookery

Railway Exchange Building
Peoples Gas Company Building
Columbus Memorial Building

Care in Manufacture

EACH process in the manufacture of Maple, Beech and Birch flooring employed by the advanced producers of to-day has become an exact science and so skillful, accurate, and painstaking are the methods used that the finished article is practically perfect in all respects.

The lumber is first carefully air-seasoned by piling each width alone and separating the boards sufficiently to permit a free circulation of air throughout the piles, and allowing the lumber to remain in pile eight months to one year before it goes to the factory.

It is then kiln-dried by placing it in the kilns loaded on trucks in separate widths as in air-drying, to produce the largest possible circulation and thus eliminate all moisture from the lumber preventing subsequent shrinkage. It is left in the kiln for a sufficient length of time at varying temperatures as may be required until the kiln-drying is thorough and complete.

Unless air-seasoning and kiln-drying are properly done in the most scientific manner, the flooring will be unsatisfactory in subsequent use.

From the kilns the lumber is taken to the cooling-rooms, where the wood regains a normal and permanent condition, after which it is made into flooring by machines of the highest mechanical precision and efficiency, especially constructed for each process of manufacture.

The flooring is then sorted into grades, bundled and stored in dry, well-ventilated warehouses, and when shipped is loaded in box cars only, so it will be kept dry.

All the work is done under expert supervision and no effort is spared to improve the methods of manufacture and to maintain the excellence and high standard of the product.

Federal Building, Chicago

Association Standard Grades

AFTER years of experience the manufacturers have found the designations: CLEAR, for the First Grade; No. 1, for the Second Grade; FACTORY, for the Third Grade; to be the most convenient and satisfactory to use in the manufacture, grading and sale of their products, and architects are recommended to employ these established trade names in their specifications in order to avoid disputes and misunderstandings.

As a result of persistent efforts, the products of the Association factories have been brought up to high standards of excellence and merit in manufacture and quality, so if you specify "Association Grades" you are certain to get flooring of the grade you desire to use.

In the manufacture and grading of Maple, Beech and Birch flooring, the highest type of machinery and workmen are employed, but years of experience have shown that the most efficient inspectors will occasionally let some pieces slip into the wrong grade. Consequently if a reinspection does not result in a difference in favor of the party complaining of more than 2 per cent in money value from the original inspection, the party demanding the reinspection shall accept the flooring as originally graded and pay all expenses connected with the reinspection.

Munsey Building, Washington, D. C.

As the grading rules sometimes change with conditions, the present rules are printed in detachable form in the back of this book, but if you so request you will be advised of future changes.

Characteristics of Grades

THE characteristics of each grade are briefly and well defined in the present grading rules, namely:

CLEAR has one face free of all defects that will impair its general appearance and durability, but the question of color and mild discoloration is not considered, and an occasional slight discoloration caused by the cross-piece used in piling the rough lumber during the process of air-seasoning is not classified as a defect.

WHITE CLEAR is special stock manufactured from White Clear Maple lumber from the outside of the log, winter-sawed and end-piled in sheds to prevent staining, is almost ivory white, and is the finest grade of Maple flooring it is possible to produce.

The grades of Red Clear Beech and Red Clear Birch are manufactured as their names indicate from all-red face stock, especially selected for color and are free from all defects. The color is a rich warm tint peculiar to no other wood.

No. 1 admits of tight sound knots and slight imperfections in dressing and the more prominent discolorations not admitted in the grade of Clear and lays without waste.

FACTORY is of such a character as will lay and give a good serviceable floor for factory, warehouse and kindred uses.

The quality of the flooring in the condition in which it leaves the manufacturer is held to govern the grade, as subsequent lack of care and improper treatment in laying, scraping or finishing are not chargeable to the manufacturer.

Maison Blanche, New Orleans

McCormick Building
First National Bank Building
Butler Brothers
Tribune Building

Boston Store
Marshall Field & Company
Studebaker Building
Home Insurance Building

Continental and Commercial Bank Building
Carson, Pirie Scott & Co.
Hibbard, Spencer, Bartlett & Company
New York Life Building

Uses of Standard Grades

CLEAR or first quality is suitable for Apartment Buildings, Churches, Clubs, Dancing Floors, Gymnasiums, Hospitals, Hotels, Office Buildings, Public Buildings, Residences, Roller-Skating Rinks, Schoolhouses, Stores, and similar buildings.

No. 1, or second quality, is a common grade and its relation to Clear is similar to that between second and first grade of finish. It is just as serviceable as Clear and equally as desirable when there is no objection to the appearance and it can be used in the same class of buildings as the Clear grade at a material saving in the cost of construction.

The FACTORY, or third grade, will give excellent satisfaction in Factories, Creameries, Granaries, Mills, Warehouses, Workshops, and in other buildings, at mines, on farms, etc. Where a low-priced floor is wanted for *wear* nothing better or cheaper can be obtained than this grade.

Thicknesses *and* Faces

Maple, Beech and Birch Matched Stock

STANDARD THICKNESS	FACES	GRADES
$\frac{13}{16}$″	1½″ 2″ 2¼″ 3¼″	CLEAR, NO. 1, FACTORY
SPECIAL THICKNESSES		
$1\frac{1}{16}$″ $1\frac{5}{16}$″ $1\frac{11}{16}$″	2″ 2¼″ 3¼″	CLEAR, NO. 1, FACTORY
⅜″	⅞″ 1″ 1½″ 2″ 2¼″	CLEAR and NO. 1 only
½″ ⅝″	1½″ 2″ 2¼″	CLEAR and NO. 1 only

Standard Measurement

⅝″ and thicker, all Faces, is measured ¾″ waste for matching.
½″ and thinnner, all Faces, is measured ½″ waste for matching.

To Ascertain Quantity Required

To ascertain the number of feet of flooring required to cover a given area, find the number of square feet of floor space to be covered and add thereto the following percentages:

MATCHED STOCK	⅝″ AND $\frac{13}{16}$″ THICK	⅜″ AND ½″ THICK
1½″ Face Flooring	50%	33⅓%
2″ Face Flooring	37½%	25%
2¼″ Face Flooring	33⅓%	22½%
3¼″ Face Flooring	24%	not made

Emerson School, Salt Lake City
High School, Madison, Wisconsin
High School, Yuma, Arizona

State Normal School, San Diego, California
High School, Boyne City, Michigan
High School, San Jose, California
High School, San Diego, California

Uses of Different Thicknesses & Faces

Thicknesses

THE $\frac{13}{16}$-inch thickness of Maple, Beech and Birch flooring is most commonly used. It can be laid directly on the joists, or on strips imbedded in cement when the latter is used for fireproofing, but is more frequently laid on a subfloor. For ordinary purposes a diagonal subfloor made of softwood boards, surfaced one or two sides, is sufficient. This may be used for the work floor during the progress of building and the hardwood floor should not be laid until the building is dry.

For factories and warehouses where greater strength and slow-burning construction are required, the subfloor should be made of matched softwood $1\frac{3}{4}$ inches thick.

The $1\frac{1}{16}$-inch thick hardwood flooring is sometimes preferred when the floor is to be subjected to extraordinary hard wear and usage, but the $\frac{13}{16}$-inch is suitable for general purposes.

The $\frac{1}{2}$-inch thickness is suitable for apartment buildings, churches, clubs, offices and similar buildings. Under ordinary foot wear it is as serviceable as the $\frac{13}{16}$-inch and costs less. If the subfloor is uneven, the $\frac{1}{2}$-inch flooring will produce more satisfactory results than the $\frac{3}{8}$-inch thick.

The $\frac{3}{8}$-inch is the most popular thickness under $\frac{13}{16}$-inch. It is superior to parquetry because the sides and ends of the flooring are matched so that it can be laid with the nails entirely concealed, and they cannot work out. It is suitable for residences, apartment buildings, offices, churches, etc., where both its appearance and utility are important. Factory $\frac{13}{16}$-inch Maple or Beech makes an ideal subfloor for the $\frac{3}{8}$-inch.

Faces

In $\frac{13}{16}$-inch and $\frac{1}{2}$-inch flooring, the $2\frac{1}{4}$-inch face is usually preferred and in the $\frac{3}{8}$-inch the $1\frac{1}{2}$-inch face is a happy medium. Narrower faces require a larger quantity of flooring to cover a given area and the labor cost of laying is greater, but the resulting floor is worth the additional investment when one is looking for something better than ordinary. The wider faces are not so desirable in appearance but usually cost less for material and labor.

Association Standard Lengths

The standard lengths in the different grades are as follows:

CLEAR—2 feet to 16 feet

May contain what 2 feet to 3½ feet the rough lumber produces up to 10 per cent.

No. 1—1½ feet to 16 feet

May contain what 1½ feet to 3½ feet the rough lumber produces up to 25 per cent.

FACTORY—1 foot to 16 feet

May contain what 1 foot to 3½ feet the rough lumber produces up to 50 per cent.

Architects will find it more advantageous to specify and use the Standard run of lengths in the different grades instead of special long lengths because lengths selected 4 feet or 6 feet and longer are much more expensive without compensating benefits.

Modern perfected methods of manufacturing hardwood flooring produce a larger proportion of shorter lengths than the old-time methods, because the defects are cut out closer, thus improving the average quality of the flooring, and experience has demonstrated that shorter lengths combined with longer lengths cost no more to lay and make as good or better floor at a material saving in cost than all long lengths. The shorter lengths can also be used to advantage in closets and other small spaces.

Ely Walker Dry Goods Co., St. Louis

The stand of Maple, Beech and Birch stumpage is limited and is becoming rapidly depleted and the sentiment in favor of conservation of forest resources is strongly in favor of the utilization to the greatest extent of these valuable woods, especially when the result attained in the finished floor is in nowise depreciated.

Care After Leaving Factory

HARDWOOD flooring is air-seasoned and thoroughly kiln-dried and it should not be exposed to dampness and the same care which the manufacturer uses to keep it dry should be continued after it leaves the factory.

Therefore

Don't unload it in damp weather.

Don't store it in newly-plastered buildings.

Don't store it in an open shed with one end exposed to the weather—the exposed ends will absorb moisture and swell wider than the inside ends.

Don't take less care of it than you would of inside finish.

Kenilworth Assembly Hall, Kenilworth, Illinois

A group of New York City buildings floored with Association Flooring

Macey's Store
McCreery Building
Bush Factory Building

John Wanamaker's Store
Bryant Park Studios
Altman Store

Saks & Company's Store
Gimbel Brothers
Belnord Apartments

Laying the Floor

THE flooring should never be laid until all dampness is out of the building, otherwise the flooring will bulge or buckle up and produce an uneven surface.

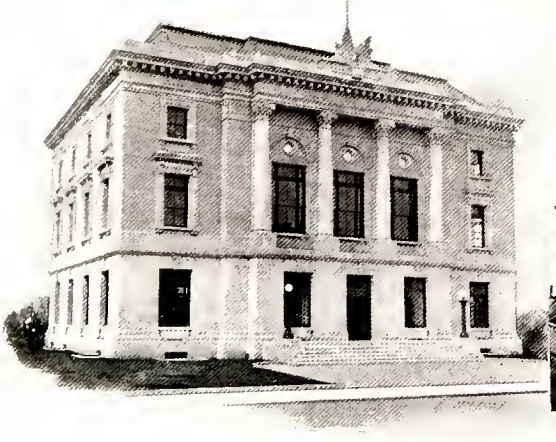
When floor lining is used the hardwood flooring should be laid crosswise or diagonal to the subfloor, which should be smooth, clean and dressed to even thickness. A subfloor, however, is not absolutely necessary under $\frac{13}{16}$-inch and thicker hardwood flooring, as it can be laid on joists or deafening strips without reference to breaking joints on the joists because it is all side-matched and end-matched, the end-matching practically making one continuous strip of flooring from wall to wall. Every fourth strip of flooring should be driven up snugly by using a wooden block and a sledge.

The flooring is furnished mixed lengths together, which facilitates rapid laying, as it enables the workmen to combine the lengths economically and avoids unnecessary waste in cutting. The shorter lengths are particularly handy in this respect as they fit in readily and can be driven together quickly with a tap of the hammer.

When it is necessary to trim a piece of flooring to finish out a course, it is better to use a piece of sufficient length so that the part trimmed off may be used for starting a new course. This is an economy which will suggest itself to competent floor-layers.

It has been found of some advantage in urgent cases when the flooring *must* be laid before the building is dry to leave open spaces about a foot or so wide at intervals in the floor to allow for expansion and then finish laying the flooring in these vacant spaces after the building is dry. While this method lessens to some extent the always unsatisfactory results of laying hardwood floors in damp buildings, it does not by any means eliminate them. Wait until the building is dry and have a perfect floor.

The appearance of good flooring is sometimes spoiled by improper finishing and it is recommended that you consult a competent floor finisher in your city or obtain information from the manufacturer who furnished the flooring as to the best method of finishing the floor for the use intended, and its subsequent care.



Post Office, Coldwater, Michigan
Post Office, Omaha, Nebraska
Post Office and Court House, Eau Claire, Wisconsin

Post Office, Dixon, Illinois
Post Office and Court House, Lincoln, Nebraska
Post Office Grand Rapids, Michigan

The Proper Nail to Use

IT is very essential that the proper nail be used in laying hardwood flooring to prevent splitting the tongue and bruising the face. For the best results the following are recommended:

3-Penny Finishing Nail for $\frac{3}{8}$-inch thick used 9 inches apart.
3-Penny Bung-Head Casing Nail for $\frac{1}{2}$-inch thick used 12 inches apart.
4-Penny Bung-Head Casing Nail for $\frac{5}{8}$-inch thick used 12 inches apart.
8-Penny Cut Flooring Brad for $\frac{13}{16}$-inch thick used 16 inches apart.
10-Penny Cut Flooring Brad for $1\frac{1}{16}$-inch thick used 16 inches apart.
16-Penny Cut Flooring Brad for $1\frac{5}{16}$-inch thick used 16 inches apart.
16-Penny Cut Flooring Brad for $1\frac{11}{16}$-inch thick used 16 inches apart.

The 3- and 4-Penny are wire nails and on account of the small gauge and medium length are best adapted to thin flooring. The 8-, 10-, and 16-Penny are steel-cut nails, manufactured especially for laying hardwood flooring and are being used by all up-to-date contractors and floorlayers. This nail is the same thickness from point to head and has two

"The Home of Shredded Wheat," Niagara Falls, New York

McKinley High School, Chicago, Ill.
Guarantee Trust Bldg., Birmingham, Ala.
Post-Office, Atlanta, Ga.
Home for Adult Blind, Oakland, Cal.

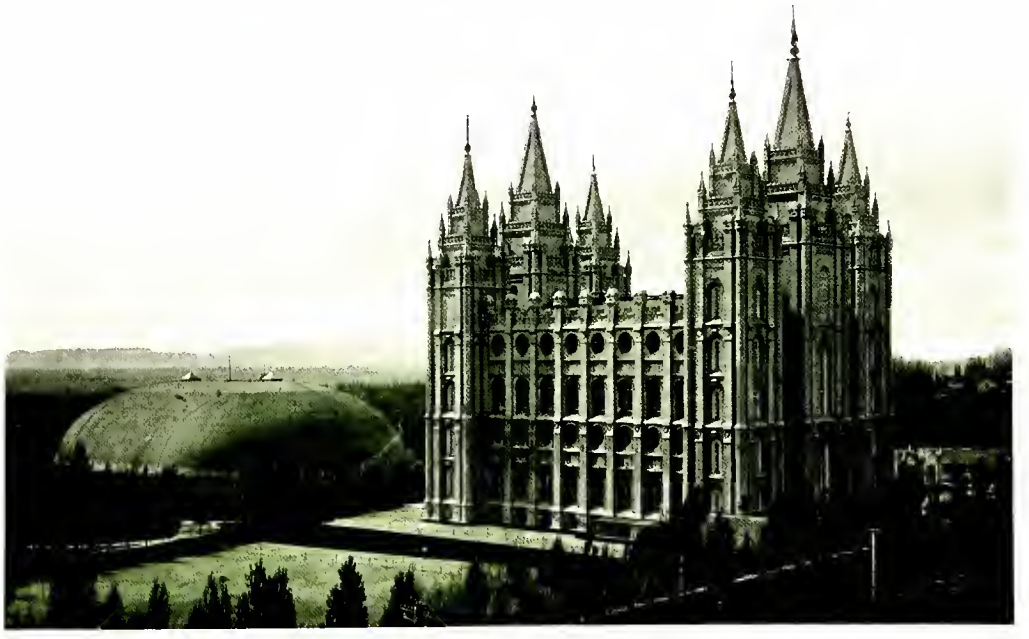
Empire Building, Birmingham, Ala.
Henry W. Oliver Building
Pittsburgh, Pa.
Securities Building, Des Moines, Ia

Packard Motor Car Co., Detroit, Mich.
Hibernia Bank Bldg., New Orleans, La.
New Cliff House, San Francisco, Cal.
Bowen High School, Chicago .Ill.

smooth sides which are set parallel with the tongue, eliminating the strain from the narrow part of the tongue. It is wedge-shaped in width, which puts the entire strain lengthwise of the tongue. The rough edges give this nail drawing and holding qualities not contained in any other nail, and after being driven its entire length, it remains in position, producing and maintaining a perfectly tight joint.

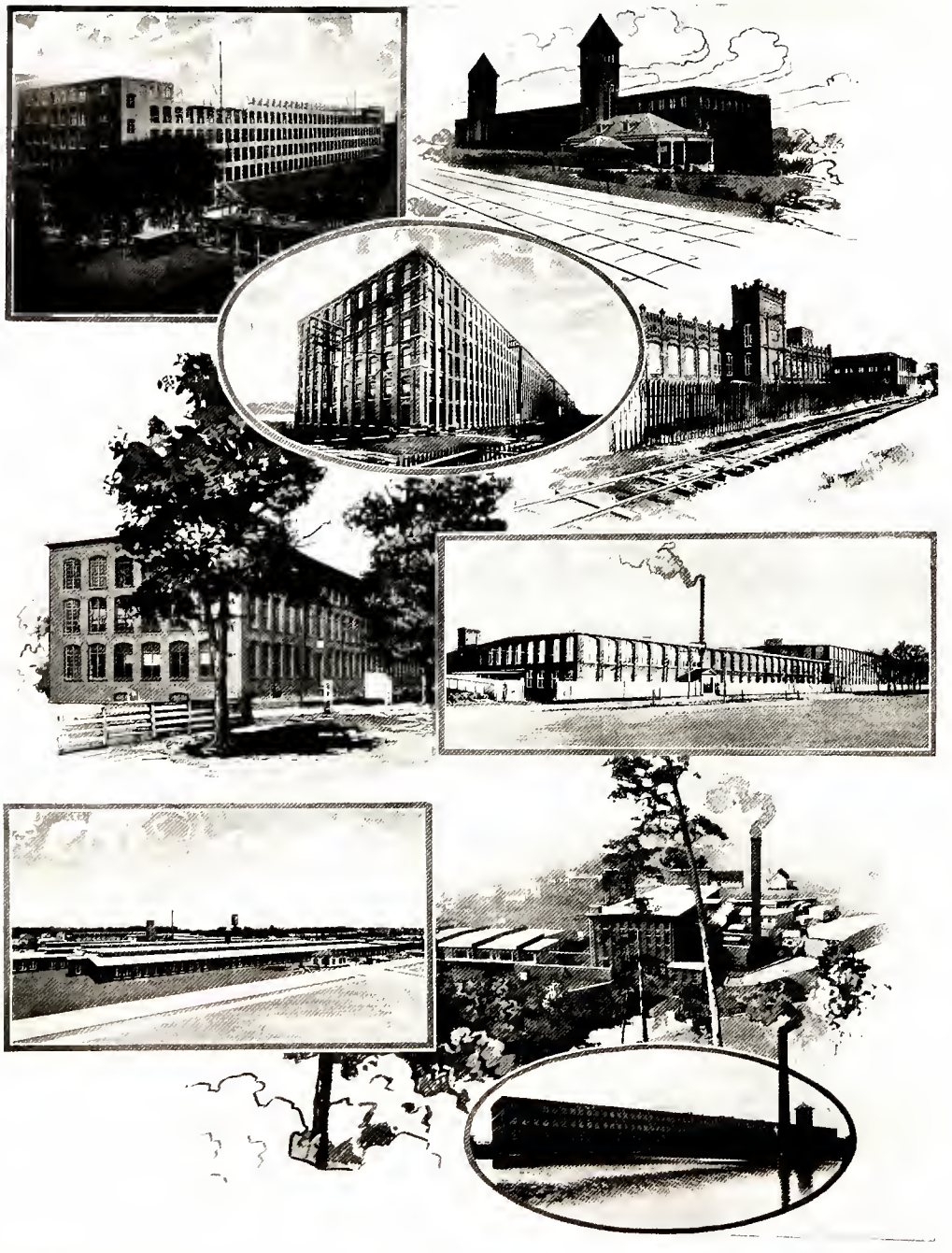
The nails should be driven at an angle of 45 degrees and it has been found that better results can be accomplished by using no nails within six inches of the end of a piece of flooring.

The use of these nails draws the flooring to its proper place and obviates the necessity of boring the flooring. Consequently the practice of boring is being discontinued by the manufacturers, because it has been demonstrated to be of no practical value; and as it is not an essential feature in the manufacture and grading of flooring, the absence of it will not be considered a basis for any reclamation.



Mormon Temple, Salt Lake City, Utah

A few of many Cotton Mills floored with Association Maple Flooring



Pacific Mills, Lawrence, Mass.
Graniteville Mfg. Co., Graniteville, S. C.
Cannon Mfg. Co. and Patterson Mfg. Co.,
Kannapolis, N. C.

Everett Mills, Lawrence, Mass.

The Lancaster Cotton Mills, Lancaster, S. C.
Hamburger Cotton Mills, Columbus, Ga.
Nonquit Cotton Mills, New Bedford, Mass.
The Courtenay Mfg. Company, Newry, S. C.
Dwight Mfg. Company, Alabama City, Ala.

Jointed Flooring

JOINTED or Square-Edge flooring is used in factories, mills, warehouses and other places where the wear is rapid and continuous. In cotton, silk and paper mills the flooring under the machines receives no wear, but in the alleys and runways the wear of the trucks is excessive. This style of flooring has no tongue or groove and the pieces which wear out can be quickly and easily replaced. It may be either end-matched or butted. The nails are driven through the face of the piece and the heads countersunk.

Thicknesses

$\frac{13}{16}$-inch and $1\frac{1}{16}$-inch are the standard thicknesses. In modern factory construction a Maple, Beech or Birch wearing floor is laid over a heavy pine, spruce or hemlock subfloor. Economy is attained in certain cases by using $1\frac{5}{16}$-inch or $1\frac{11}{16}$-inch matched Maple to eliminate the subfloor.

Faces

The faces or finished widths are 2½-inch, 3½-inch, 4-inch and 4½-inch. 3½-inch and wider flooring is usually manufactured with a double groove in the back. This is intended to resist the tendency of wide flooring to curl at the edges. The 3½-inch face is more generally used.

Measurement

Jointed flooring is measured as the rough lumber from which it is made, ½ inch being added to the face for waste in ripping and dressing to size. For example, $\frac{13}{16}$ inch x 3½ inches is measured 1 inch x 4 inches.

New Carnegie Library, New Orleans

Cobb Building, Seattle, Washington
Residence, Los Angeles, California
Emporium Building, San Francisco, California

Residence, Pasadena, California

White Building, Seattle, Washington
Residence, Los Angeles, California
White House Building, San Francisco, California

Maple Bowling-Alley Flooring

Finished Size ¾ inch x 3½ inches. Measured 1 inch x 4 inches.

The flooring is surfaced on two edges and tongued and grooved in the center on the sides.

In building an alley floor the lengths are sorted evenly and the flooring bored by the floor-layer for a ½-inch bolt every 28 or 30 inches.

It is then set on edges, nailed through the tongue every 24 inches with a 7-penny nail, and screwed up firmly with a ½-inch bolt run through from side to side. The head and nut of this bolt should be countersunk in the tongue and groove. When the floor is put together as described, it is planed and scraped to an even surface.

On account of the excessive waste, only selected stock is manufactured into bowling-alley flooring. After being thoroughly air-dried this stock is carefully kiln-dried before manufacture.

Minneapolis Club House, Minneapolis, Minn.

Normal and Latin School, Boston, Mass.
Waterville Trust Building, Waterville, Me.
Plymouth Congregational Church, Minneapolis

R. A. Long Building, Kansas City, Mo.

Unitarian Church, Helena, Mont.
Elks Club House, Des Moines, Ia.
Buick Automobile Factory, Flint, Mich.

Rules

For Grading Maple Flooring

Adopted October 27, 1909

CLEAR—Shall have one face free of all defects, but the question of color shall not be considered. Standard lengths in all widths in this grade shall be trimmed 2 to 16 feet, inclusive; the proportion of lengths 2 to 3½ feet shall be what the stock will produce up to 10 per cent.

No. 1—Will admit of tight, sound knots and slight imperfections in dressing, but must lay without waste. Standard lengths in all widths in this grade shall be trimmed 1½ to 16 feet, inclusive; the proportion of lengths 1½ to 3½ feet shall be what the stock will produce up to 25 per cent.

FACTORY—Must be of such character as will lay and give a good serviceable floor, with some cutting. Standard lengths in all widths in this grade shall be trimmed 1 to 16 feet, inclusive; the proportion of lengths 1 to 3½ feet shall be what the stock will produce up to 50 per cent.

Maple Flooring Manufacturers' Association

Rogers & Company
Chicago – New York

CONSERVATION
REVIEW: 12-8-92
No further action